REMARKS

Reconsideration of the application in view of the following remarks is respectfully requested.

As a preliminary matter, Applicants appreciate the indication of allowable subject matter in claims 9 and 19.

Information Disclosure Statement (IDS)

Applicants acknowledge with appreciation the signed PTO-1449 forms for the IDSs filed on June 14, 2002, August 30, 2002 and January 29, 2004 that were returned with the Office Action. However, and as noted by the Examiner, the PTO-1449 form for the IDS filed on October 15, 2001 has not been returned with the Examiner's signature and initials.

A copy of the PTO-1449 form filed on October 15, 2001 and a copy of the corresponding return receipt postcard stamped by the PTO are attached to this response for the Examiner's convenience in locating the cited references in the file. Applicants respectfully request the cited references be considered with regard to the pending claims and that a copy of the attached PTO-1449 form initialed and signed by the Examiner be returned to Applicants.

Drawing Objection

The Examiner objected to Figure 9, noting reference numeral 150 should designate "ONLINE λ_{xform}" as opposed to "OFFLINE λ_{xform}." By the present response Applicants hereby attach replacement and annotated sheets of Figure 9. As shown in the attached sheets, Figure 9 has been amended to replace "OFFLINE λ_{xform}," as designated by reference numeral 150, to "ONLINE λ_{xform}" and respectfully request withdrawal of the present drawing objection.

Claim Rejection under 35 U.S.C. § 102(b)

The Examiner rejected claims 1 and 12 under 35 U.S.C. § 102(b) as being allegedly anticipated by Medved et al. (U.S. Patent No. 5,818,619). Applicants respectfully traverse this rejection.

Applicants' independent claim 1 recites:

> "converting the fiber interface fundamental wavelength of the first optical signal to a free-space fundamental wavelength with a transmit wavelength transformer;
>
> .....
>
> converting the free-space fundamental wavelength of the second optical signal to a fiber interface fundamental wavelength with a receive wavelength transformer;"

Applicants' independent claim 12 includes similar language. Applicants' specification describes that such wavelength conversion helps to overcome a broad range of environmental impacts to the free-space optical signal, such as fog. (See Applicants' specification, page 9, line 22 to page 11, line 5).

In rejecting claims 1 and 12, the Examiner asserted that Medved et al. discloses "converting (i.e., RXU 24 and airlink transmitter 26 , Fig. 1) the fiber interface fundamental wavelength of the first optical signal to a free-space fundamental wavelength with a transmit wavelength transformer (i.e., RXU 24 and airlink transmitter 26, Fig. 1)" and "converting (i.e., airlink receiver 21 and TXU 20, Fig. 1) the free-space fundamental wavelength of the second optical signal to a fiber interface fundamental wavelength with a receive wavelength transformer." Applicants respectfully disagree.

Specifically, at column 5, lines 41-46, Medved et al. discloses:

> Fiber optic cable 18 is coupled to a receiver 24, also referred to as RXU, which provides data received over fiber optic cable 18 to a buffer 25. Buffer 25 is operable to provide the data in ECL or TTL format to an airlink transmitter 26.... Transmitter 26 transmits the data over the air via a lens system 27.

However, Medved et al. does not disclose the wavelength of the data received over fiber optic cable 18 from the transmitter TXN 12 and fails to disclose the wavelength of the data that is transmitted by the airlink transmitter 26. Therefore, Applicants respectfully submit that Medved et al. fails to disclose, either expressly or inherently, wherein the combined receiver RXU 24/airlink transmitter 26 actually converts the wavelength of the data received by the receiver RXU 24 (i.e., the "fiber interface fundamental wavelength") into an optical signal having a different wavelength (i.e., the "free-space fundamental wavelength") that is transmitted by the airlink transmitter 26.

Moreover, at column 5, lines 23-30, Medved et al. discloses:

> Preferably, transmitter TXU 20 operates ... in the wavelength range 800-900 nanometers, e.g., at 850 nanometers. The transmitter TXU 20 receives data from an airlink receiver 21 ... in an emitter-coupled logic (ECL) or transistor-transistor logic (TTL) format. Typically, airlink receiver 21 receives over-the-air infrared radiation via a lens system 23.

Thus, while Medved et al. does disclose the wavelength of data transmitted by the transmitter TXU 20, Medved et al. fails to disclose the wavelength of the infrared radiation received by the airlink receiver 21. Therefore, Applicants respectfully submit that Medved et al. fails to disclose, either expressly or inherently, wherein the combined airlink receiver 21/transmitter TXU 20 actually converts the wavelength of the infrared radiation received by the airlink receiver 21 (i.e., the "free-space fundamental wavelength") into a signal having a different wavelength (i.e., a "fiber interface fundamental wavelength") that is transmitted by the transmitter TXU 20.

Applicants further submit it would not be obvious to modify Medved et al. in a manner that arrives at claim 1 because Medved et al. is silent as to any suggestion or motivation that would reasonably lead one of ordinary skill in the art to modify the teachings disclosed therein in a manner that obviates claim 1. Indeed, the only suggestion to convert a wavelength of an optical signal to and from a "free-space fundamental wavelength" is found in the Applicants' specification.

The elements recited in claim 12 are similar to those recited in claim 1. Therefore, Applicants' remarks presented above with respect to the rejection of claim 1 are equally applicable to the rejection of claim 12.

For at least the reasons presented above, Applicants submit that Medved et al. fails to anticipate claims 1 and 12 and, consequently, request withdrawal of the rejection of these claims under 35 U.S.C. § 102(b).

Claim Rejections under 35 U.S.C. § 103(a)

The Examiner rejected claims 2-7, 10, 11, 13-17, 20 and 21 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Medved et al. in view of Geiger (U.S. Patent No. 5,377,219). Applicants respectfully traverse this rejection.

Claims 2-7, 10, 11, 13-17, 20 and 21 variously depend from claims 1 and 12. As established above, Medved et al. fails to anticipate claims 1 and 12. Geiger fails to cure the deficiency of Medved et al. with respect to claims 1 and 12. Therefore, Applicants respectfully submit that Medved et al. in view of Geiger fails to render the aforementioned dependent claims obvious and, consequently, request withdrawal of the rejection of these claims under 35 U.S.C. § 103(a).

The Examiner rejected claims 8 and 18 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Medved et al. in view of Kumar et al. (U.S. Patent App. Pub. No.

2002/0075542). Applicants respectfully traverse this rejection.

Claims 8 and 18 variously depend from claims 1 and 12. As established above, Medved et al. fails to anticipate claims 1 and 12. Kumar et al. fails to cure the deficiency of Medved et al. with respect to claims 1 and 12. Therefore, Applicants respectfully submit that Medved et al. in view of Kumar et al. fails to render the aforementioned dependent claims obvious and, consequently, request withdrawal of the rejection of these claims under 35 U.S.C. § 103(a).

The Examiner rejected claims 22, 28, 29, 34, 35, 42, 43 and 50 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Medved et al. in view of Ransford et al. (U.S. Patent No. 6,532,087). Applicants respectfully traverse this rejection.

Elements recited in claims 22, 29, 35 and 43 are similar to those variously recited in claims 1 and 12. Therefore, Applicants' remarks presented above with respect to Medved et al. as applied in the rejection of claims 1 and 12 are equally applicable to the rejection of claims 22, 29, 35 and 43. Moreover, Ransford et al. fails to cure the deficiency of Medved et al. with respect to claims 22, 29, 35 and 43. Therefore, Applicants respectfully submit that Medved et al. in view of Ransford et al. fails to render claims 22, 29, 35 and 43 obvious and, consequently, request withdrawal of the rejection of claims 22, 28, 29, 34, 35, 42, 43 and 50 under 35 U.S.C. § 103(a).

The Examiner rejected claims 23-25, 30-32, 36-39, 44-47 and 49 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Medved et al. in view of Ransford et al. and further in view of Geiger. Applicants respectfully traverse this rejection.

Claims 23-25, 30-32, 36-39, 44-47 and 49 variously depend from claims 22, 29, 35 and 43. As established above, Medved et al. in view of Ransford et al. fails to render claims 22, 29, 35 and 43 obvious. Moreover, Geiger fails to cure the deficiency of Medved et al. in view of Ransford et al. with respect to claims 22, 29, 35 and 43. Therefore, Applicants respectfully submit that Medved et al. in view of Ransford et al. and further in view of Geiger fails to render the aforementioned dependent claims obvious and, consequently, request withdrawal of the rejection of these claims under 35 U.S.C. § 103(a).

The Examiner rejected claims 26, 27, 33, 40, 41 and 48 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Medved et al. in view of Ransford et al. and Geiger and further in view of Kumar et al. Applicants respectfully traverse this rejection.

Claims 26, 27, 33, 40, 41 and 48 variously depend from claims 22, 29, 35 and 43 via claims 24, 31, 38 and 46, respectively. As established above, Medved et al. in view of

Ransford et al. and Geiger fails to render claims 22, 29, 35 and 43 obvious. Moreover, Kumar et al. fails to cure the deficiency of Medved et al. in view of Ransford et al. and Geiger with respect to claims 22, 29, 35 and 43. Therefore, Applicants respectfully submit that Medved et al. in view of Ransford et al. and Geiger and further in view of Kumar et al. fails to render the aforementioned dependent claims obvious and, consequently, request withdrawal of the rejection of these claims under 35 U.S.C. § 103(a).

No Fees Believed to be Due

No fees are believed to be due to file this response.

CONCLUSION

Applicants submit that the above amendment and remarks place the pending claims in a condition for allowance. Therefore, a Notice of Allowance is respectfully requested. However, should there remain any outstanding issues that require adverse action, it is respectfully requested that the Examiner telephone Kurt M. Eaton at (858) 552-1311 so that such issues may be resolved as expeditiously as possible.

Respectfully submitted,

Dated: June 22, 2005

Kurt M. Eaton
Reg. No. 51,640
Patent Agent for Applicants
(858) 552-1311

Attachments: Copy of Form PTO-1449 Filed October 9, 2001
Copy of Return Receipt Postcard Confirming USPTO Receipt of Form PTO-1449 on October 15, 2001
Figure 9 Replacement Drawing Sheet
Figure 9 Annotated Sheet Showing Changes

Address all correspondence to:
FITCH, EVEN, TABIN & FLANNERY
120 So. LaSalle Street, Ste. 1600
Chicago, IL 60603

Direct telephone inquiries to:
Kurt M. Eaton
(858) 552-1311
San Diego, California Office of
FITCH, EVEN, TABIN & FLANNERY